REMARKS

Claims 1 and 3-12 are pending in the application. The status of these claims is as follows:

Claims / Section	35 U.S.C. Sec.	References / Notes
11, 12	§112, first paragraph, written description	• No description for "native signal"
1 & 3-12	§103(a) obviousness	• Alexandrescu (U.S. Patent No. 5,909,497), and applicant's specification

Applicants have amended claims 1, 8, and 10 to clarify that the line signal is one that deflects an electron beam generated in an image tube. Support for these amendments can be found in paragraph [0008] of the Specification. Applicants have further added claims 13 and 14 in which the detector detects the mere presence of a line signal, and the detection is based on either an electromagnetic or acoustic detection of the line signal itself. Support for these claims can be found in paragraphs [0009] and [0010] of the Specification.

Applicants note the following informalities in the OA. On p. 2, the Examiner indicated that the present OA is in response to the application filed on January 9, 2006. Applicants understand that this is a typographical error and should refer to Amendment B filed on January 9, 2006. Similarly, the status box 1 on the OA Summary should indicate that this is responsive to the communications filed on January 9, 2006. Box 2b should not be checked, as this is indicated as being a Final Office Action. Boxes 4 and 6 should indicate that claim 2 has been cancelled,

and should refer to claims 1 and 3-12. Box 9 should not indicate that the Specification is objected to by the Examiner, since all objections were dealt with in the previously submitted Amendment B, and the Examiner has not included a basis for objecting to the application in the present OA.

Applicants' use of reference characters below is for illustrative purposes only and is not intended to be limiting in nature unless explicitly indicated.

35 U.S.C. §112, FIRST PARAGRAPH, CLAIMS 11 & 12 LACK OF ENABLEMENT

1. Applicants previously amended claims 11 and 12 (in Amendment B) to refer to a "characteristic signal" as opposed to a "native signal".

In the OA, on p. 2, the Examiner rejected claims 11 and 12 as not being enabled by the Specification since the Specification fails to teach a native signal of a screen device.

Applicants reassert previously submitted discussion related to these claims, namely that the term "native" was replaced with "characteristic" in these claims to be consistent with the Specification. Paragraphs [0008] (including the table) and [0012] clearly provide enabling support for the claim language referring to a characteristic signal.

Based on the previously submitted claim amendments, the Applicants respectfully request that the 35 U.S.C. §112, first paragraph rejection be withdrawn.

35 U.S.C. §112, SECOND PARAGRAPH, CLAIMS 1-11 INDEFINITENESS

2. Applicants have amended the independent claims to clarify the distinction between "a signal" and "an electrical signal".

In the OA, on pp. 3-4, the Examiner rejected claims 1-11 as failing to distinguish between "a signal" and "electrical signal". The Examiner indicated that these are taught as being two separate entities, whereas the drawings teach that these terms have the same meaning. The Examiner then indicated that it is not understood whether the applicant intended for the detector to receive a signal that is distinct and dissimilar to the signal received by the input device.

Applicants have amended the claims to distinguish: 1) the "line" signal (related to a line scanning frequency of a display), or more broadly (claims 11 and 12) the "characteristic" signal (which can be any signal associated with a standard for operating the screen device), from 2) the electrical signal that is processed by the signal processing unit. However, the distinction for the purposes of clarifying the scope of the claim do not necessarily mean that these signals are physically or acoustically separated outside of the hearing device. Paragraph [0009] of the Specification indicates that the line signal may, in fact, be an audible/acoustic signal and therefore could be a part of the input signal (as shown in Figure 1), although paragraph [0010] indicates that the line signal may be an electromagnetic signal as well (in which case, it would *not* be a part of the acoustic signal). All the claims require is that a transduced electrical signal that is processed be present, and a line or characteristic signal indicative of a screen device is also present and is detected that in some way affects how the transduced electrical signal is processed. There is

nothing in the claim that *requires* these signals to be either physically separate or together.

3. Applicants have amended claim 8 to correct the error introduced by the previous amendment.

In the OA, on p. 4, the Examiner correctly assumed that a typographical error was present when noting that claim 8, as amended, would include two of each element. Therefore, Applicants have amended claim 8 to correctly make it an independent claim, as previously intended.

Based on the amendments and above explanation, Applicants respectfully request that the Examiner withdraw the 35 U.S.C. §112 rejections from the present application.

35 U.S.C. §103(a), CLAIMS 1 AND 3-12 OBVIOUSNESS OVER ALEXANDRESCU IN VIEW OF APPLICANTS' SPECIFICATION

4. The combination of Alexandrescu's content-based signal and Applicants' Specification does not teach or suggest detecting a line signal that deflects an electron beam generated in an image tube.

In the OA, on pp. 2-5, the Examiner rejected the independent claims in the application as being obvious over Alexandrescu in view of Applicants' Specification. The Examiner, on p. 3, first paragraph, indicated that Alexandrescu teaches a detector (41 in conjunction with 53) for detecting a line signal output by a screen device (8/5-18). In the Response to Arguments section on pp. 5-6, the Examiner noted that Applicants' claim language does not stipulate that the "line" signal must

be anything in particular that is outputted from the television, and is thus reading the term "line signal" very broadly.

Applicants have amended claims 1, 8, and 10 to clarify that the line signal being referred to in the claims is the signal that deflects an electron beam generated in an image tube.

With this clarifying language, Applicants repeat the previously submitted arguments below.

The amendments to claims 1, 8, and 10 serve to distinguish the present invention from Alexandrescu because Alexandrescu deals with a content-based encoding that is provided in the signal.

The present invention concerns a hearing device which can be adapted to different auditory situations via various auditory programs. The hearing device accomplishes this by reliably and automatically recognizing the auditory situation "television" or "screen device" and reliably, automatically switching into the corresponding auditory program in this auditory situation. Accordingly, one of the signals emitted by the screen device, which actually represents an electromagnetic interference signal, is detected by the appertaining hearing device, and from this the proximity to an activated screen device can be reliably determined.

Alexandrescu does not teach the detection of a line signal that deflects an electron beam generated in an image tube output by the screen device, and adjustment of the hearing device that is dependent upon this thusly defined line signal, but rather teaches the detection of information that has been encoded into

the signal, and the adjustment that takes place is dependent upon this encoded information, and not the signal itself or an inherent attribute thereof.

Alexandrescu states, in pertinent part (8/5-18):

> Another manner of programming the hearing instrument according to the invention would be to use a television signal, particularly one that is used for closed-captioning of television broadcasts. In this manner, the appropriate parameters or program for a television broadcast would be encoded into the television signal. Thus, for example, if the particular broadcast includes a loud noise, such as an explosion, the television signal includes, shortly before the explosion, program codes to modify the response parameters of the hearing instrument for this loud noise. Thus, the program codes are appropriately decoded to form part of the audio or electromagnetic signal for the hearing instrument and the hearing instrument is appropriately programmed for the upcoming loud noise, so as to minimize the discomfort a user may feel.

The fact that the device of Alexandrescu operates upon information that has been expressly encoded for the device is not a trivial distinction.

Alexandrescu deals with adjusting a hearing device in a particular manner to an acoustic signal emitted by a television. This is achieved in that additional information that can be used for the adjustment of hearing devices is added to a television signal transmitted from a television emitter to the television. For example, Alexandrescu teaches that information is encoded into the television signal that indicates an explosion follows. The hearing device can then be pre-adjusted corresponding to this event. This procedure entails an enormous effort to embed and encode the required information. All films or transmissions would have to be checked for the purpose of determining whether critical acoustic situations for the

hearing device user arise so that, in such cases, a type of "advance warning" for the hearing devices can be emitted. Both the television and the hearing device industry would have to agree on corresponding transmission standards so that a large number of users could make use of the specified possibility.

Furthermore, Alexandrescu assumes that the hearing device user with his hearing device is already located in front of the activated television and the hearing device is already operated in a corresponding mode to receive the encoded signals. Only in this case does it make sense when the corresponding hearing device makes use of the auxiliary function specified in Alexandrescu. How the appertaining hearing device arrives at the "television" mode in Alexandrescu (manually or automatically) remains completely undisclosed in Alexandrescu. Alexandrescu presumes the very presence of the thing that the present invention seeks to detect.

Furthermore, claims 8 and 10 require that the detection is based on the presence of the line signal, as defined by the amended claim language, and not based on information encoded into any signal produced by the display device. Newly added claims 13 and 14 highlight that the detection is *solely* based on the presence of the line signal and not based on any content that has been encoded into the signal, as is taught by Alexandrescu. Advantageously, and not obvious from the teaching of Alexandrescu, the present device and method can operate with respect to normal display devices and normally generated signals that do not have to be specially adapted to include encoded information. This is a substantial and non-obvious advantage over the prior art.

With regard to claims 8, 11, and 12, Applicants reiterate previously submitted arguments with respect to the currently amended claim language, namely, that while it may be obvious to use a world standard pertaining to a display device in a particular display, it is not obvious to use a display standard as a criteria for detection and adjustment of a hearing device regardless of how well known such a standard is, when comparing with art that teaches a content-based analysis of the signal. As noted previously, Alexandrescu presumes the very presence of the thing that the present invention seeks to detect. Alexandrescu's operations revolve around content-based signal information, whereas the present invention relates to characteristic-based signal information. The present invention performs a different operation in the mere presence of such characteristic-based signal information, which is beyond the capability of the system disclosed by Alexandrescu. This distinction is non-obvious to those of skill in the art. The present invention operates in the environment of an activated display device and, although operates very specifically, does so in a relatively uncomplicated manner that cannot be determined from the cited prior art.

For these reasons, Applicants assert that the amended claim language and the above arguments clearly distinguish over the prior art, and respectfully request that the Examiner withdraw the §103(a) rejection from the present application.

CONCLUSION

Inasmuch as each of the rejections have been overcome by the amendments and arguments presented, and all of the examiner's suggestions and requirements

have been satisfied, it is respectfully requested that the present application be reconsidered, the rejections be withdrawn and that this application be passed to issue.

Respectfully submitted,

(Reg. No. 45,877)

Mark Bergner
SCHIFF HARDIN, LLP
PATENT DEPARTMENT
6600 Sears Tower
Chicago, Illinois 60606-6473
(312) 258-5779
Attorney for Applicants

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on

September 15, 2006